

Name: _____

ml1112paper: Solve by factoring (v6)

1. Solve the equation

$$x^2 + 11x + 24 = 0$$

$$(x + 8)(x + 3) = 0$$

$$x = -3$$

$$x = -8$$

2. Solve the equation

$$x^2 - 5x - 24 = 0$$

$$(x + 3)(x - 8) = 0$$

$$x = 8$$

$$x = -3$$

3. Solve the equation

$$6x^2 + 7x - 6 = 5x^2 + 7x - 2$$

$$x^2 - 4 = 0$$

$$(x + 2)(x - 2) = 0$$

$$x = 2$$

$$x = -2$$

4. Solve the equation

$$6x^2 - 1 = 5x^2 - 2x + 2$$

$$x^2 + 2x - 3 = 0$$

$$(x - 1)(x + 3) = 0$$

$$x = -3$$

$$x = 1$$

5. Solve the equation

$$3x^2 - 13x - 56 = 0$$

$$(3x + 8)(x - 7) = 0$$

$$x = 7$$

$$x = \frac{-8}{3}$$

6. Solve the equation

$$7x^2 - 22x - 24 = 0$$

$$(7x + 6)(x - 4) = 0$$

$$x = 4$$

$$x = \frac{-6}{7}$$

7. Solve the equation

$$13x^2 - 86x + 52 = 2x^2 + 8x + 4$$

$$11x^2 - 94x + 48 = 0$$

$$(11x - 6)(x - 8) = 0$$

$$x = 8$$

$$x = \frac{6}{11}$$

8. Solve the equation

$$13x^2 - 91x + 43 = 2x^2 - 9x + 8$$

$$11x^2 - 82x + 35 = 0$$

$$(11x - 5)(x - 7) = 0$$

$$x = 7$$

$$x = \frac{5}{11}$$